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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,262	09/26/2003	Karp-sik Youn	1349.1263	4945
21171	7590	07/25/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			JOHNSON, VICKY A	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/670,262	Applicant(s) YOUN, KARP-SIK	
	Examiner Vicky A. Johnson	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/26/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the driving motor and the driving pulley must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation “an automatic tension adjusting part”, but it is unclear how the spring automatically adjusts the tension to the belt when the sliding part, which supports the pulley, is fixed by the locking part and the anti-release portion. Once the components are installed the spring does not automatically adjust the tension on the belt, the spring imparts a constant tension to the belt.

Claim 16 is unclear, because there are no structural limitations with regard to the anti-release portion. Claim 15 only recites the functional limitation that the anti-release portion prevents the pulley fixing part from being released. The screw meets that limitation, but it is unclear what is meant by “a separate fixing part”.

Claims 17 and 18 recite, “wherein the image forming apparatus is an inkjet printer”, which renders scope of the claims unclear. Is a pulley fixing device being claimed or an inkjet printer being claimed? Claims 17 and 18 do not further limit the pulley fixing apparatus they limit an inkjet printer. It appears to be a combination/subcombination problem and it is advised that the applicant cancel the

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claims and submit new claims in independent form claiming the combination of the pulley fixing apparatus and inkjet printer.

The terms "narrow" and "wide" in claim 9 is a relative term, which renders the claim indefinite. The term "narrow" and "wide" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The use of the term narrow and wide renders the guide hole indefinite because it is not known what degree the guide hole has to be wide or narrow in order to meet the limitations of the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-8, 13-15, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Holbrook (4,969,859), as best understood.

Holbrook discloses a pulley fixing apparatus comprising: a pulley fixing part (45) rotatably fixing a driven pulley (51) on the frame (see Fig 4); a sliding part (13) movably supporting the pulley fixing part on the frame (see Fig 4); and an automatic tension adjusting part (66) disposed between the pulley fixing part and the frame to elastically bias the pulley fixing part in a first direction and impart a predetermined tension to the power-transmitting belt (col. 2 lines 22-28).

Re claim 2, a plate member (47) having a driven pulley support supporting the driven pulley and exposing a circumference surface of the driven pulley that contacts the power-transmitting belt (see Fig 1) to ease installation and removal of the power-transmitting belt.

Re claim 3, the sliding part (13) comprises a slide protrusion (35) positioned at the pulley fixing part; and the frame has a protrusion guide hole (62) positioned to receive and guide the slide protrusion (see Fig 1).

Re claim 4, the sliding part comprises first, second, third, and fourth slide protrusions positioned at the pulley fixing part (see Fig 1); and the frame has corresponding first, second, third, and fourth protrusion guide holes positioned to receive and guide the respective slide protrusions (see Fig 1).

Re claims 5-8, even though product-by-process claims are limited by and defined by the process, determination is based on the product itself. The patentability of a product does not depend on its method of production (i.e. installation and assembly). See MPEP 2113.

Re claim 13, the pulley fixing part comprises a first fixing portion (49); the frame comprises a second fixing portion (37); and the automatic tension adjusting part comprises an elastic spring having one end fixed at the first fixing portion and an other end fixed at the second fixing portion (see Fig 3).

Re claim 14, the first fixing portion comprises a first hook positioned at the one end of the elastic spring (see Fig 3), and a first fixing protrusion (49) to fix the first hook

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positioned at the pulley fixing part; and the second fixing portion comprises a second hook positioned at the other end of the elastic spring (see Fig 3), and a second fixing protrusion (37) to fix the second hook positioned at the frame to protrude through a penetrated hole positioned at the pulley fixing part.

Re claim 15, the automatic tension adjusting part further comprises: an anti-release portion (64) to prevent the pulley fixing part from being released from the frame by an external force of predetermined magnitude.

Re claim 19, a locking part (64, 48, unnumbered hole see Fig 1) to lock the pulley fixing part after the tension of the power-transmitting belt installed on the driven pulley is adjusted.

Re claim 20, the locking part comprises: an elongated adjusting-guide (48) with a long axis oriented at the pulley fixing part along the direction in which the pulley fixing part is elastically urged (see Fig 1); a threaded hole (see Fig 1) positioned at the frame to correspond to the elongated adjusting-guide hole; and a locking screw (64) engaging the threaded hole through the elongated adjusting-guide hole.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook (4,969,859) in view of Burgoon (US 5,141,083).

Holbrook discloses a device as described above, but does not disclose an anti-push portion to prevent a fixing part from being pushed, having at least one projection/burr to protrude toward the fixing part.

Burgoon discloses an anti-push portion to prevent a fixing part from being pushed, having at least one projection/burr to protrude toward the fixing part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Holbrook to include an anti-push portion as taught by Burgoon in order to prevent separation of the members (col. 3 lines 6-15).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


6,743,132	Serkh	tensioner
5,964,542	Ruhe et al	tensioner
6,485,207	Allen et al	tensioner
6,485,383	Hendrincks et al	tensioner

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vicky A. Johnson
Examiner
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